C101 (CW1004A)

COPPER ALLOY

PRODUCT DESCRIPTION

With high thermal conductivity, C101 (CW1004A) is a popular choice for all types of electrical components and conductors and is used in a wide range of engineering applications. Offering high ductility and impact strength, C101 is a highly versatile material which is usually produced as HDHC (hard drawn, high conductivity). It is a popular alloy for the manufacture of all of types of electrical conductors and components.

KEY FEATURES

- Excellent for soldering
- Versatile - widespread uses
- High ductility and material strength
- Corrosion resistance is good to excellent

APPLICATIONS

- Connectors, transformers, general electronics
- Motor components, busbars, cable strips
- Heatsinks, building fascias

CHEMICAL COMPOSITION (weight %)

<table>
<thead>
<tr>
<th></th>
<th>Cu</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>Bal</td>
<td>0.10</td>
</tr>
<tr>
<td>Max</td>
<td>Bal</td>
<td></td>
</tr>
</tbody>
</table>

MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Min (MPa)</th>
<th>Max (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>200-400</td>
<td></td>
</tr>
<tr>
<td>Proof Stress 0.2%</td>
<td>50-340</td>
<td></td>
</tr>
<tr>
<td>Elongation A5 (%)</td>
<td>5-50</td>
<td></td>
</tr>
<tr>
<td>Hardness VPN</td>
<td>40-120</td>
<td></td>
</tr>
</tbody>
</table>

PHYSICAL PROPERTIES

- Density: 8.92 g/cm³
- Melting Point: 1083 °C
- Modulus of Elasticity: 117 GPa
- Electrical Resistivity: 0.0171 x 10⁶ Ω.m
- Thermal Conductivity: 391.1 W/m.K
- Thermal Expansion: 16.9 x 10⁻⁶ /K

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

© Thames Stockholders 2018

www.thamesstock.com

sales@thamesstock.com